



zfw

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Steven D. Girouard et al.  
Title: METHOD AND APPARATUS FOR CELL AND ELECTRICAL THERAPY OF LIVING TISSUE

Docket No.: 279.597US1  
Filed: November 25, 2003  
Examiner: Unknown

Serial No.: 10/722,115  
Due Date: N/A  
Group Art Unit: 1744

**MS Amendment**


Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

We are transmitting herewith the following attached items (as indicated with an "X"):

- ☒ A return postcard.
- ☒ A Communication Concerning Related Applications (2 pgs.).
- ☒ A Supplemental Information Disclosure Statement (2 pgs.), Form 1449 (2 pgs.), and copies of 25 cited documents.

If not provided for in a separate paper filed herewith, Please consider this a PETITION FOR EXTENSION OF TIME for sufficient number of months to enter these papers and please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.  
Customer Number 21186

By:   
Atty: Zhengmian Tang  
Reg. No. 55,666

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 13<sup>th</sup> day of June, 2005.

JAMES KANYUSIK  
Name

  
Signature

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.  
(GENERAL)



S/N 10/722,115

PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Steven D. Girouard et al. Examiner: Unknown  
Serial No.: 10/722,115 Group Art Unit: 1744  
Filed: November 25, 2003 Docket: 279.597US1  
Title: METHOD AND APPARATUS FOR CELL AND ELECTRICAL THERAPY OF  
LIVING TISSUE

---

**COMMUNICATION CONCERNING RELATED APPLICATIONS**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Applicants would like to bring to the Examiner's attention the following related applications in the above-identified patent application:

<u>Serial/Patent No.</u>	<u>Filing Date</u>	<u>Attorney Docket</u>	<u>Title</u>
11/017,627	December 20, 2004	279.759US1	EPICARDIAL PATCH INCLUDING ISOLATED EXTRACELLULAR MATRIX WITH PACING ELECTRODES
11/017,237	December 20, 2004	279.760US1	USE OF EXTRACELLULAR MATRIX AND ELECTRICAL THERAPY
11/017,432	December 20, 2004	279.806US1	IMPLANTABLE MEDICAL DEVICES COMPRISING ISOLATED EXTRACELLULAR MATRIX





S/10/722,115

PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant:	Steven D. Girouard et al.	Examiner:	Unknown
Serial No.:	10/722,115	Group Art Unit:	1744
Filed:	November 25, 2003	Docket:	279.597US1
Title:	METHOD AND APPARATUS FOR CELL AND ELECTRICAL THERAPY OF LIVING TISSUE		

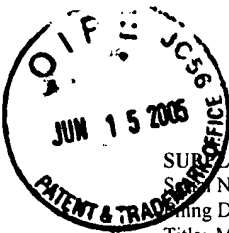
---

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

MS Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

In compliance with the duty imposed by 37 C.F.R. § 1.56, and in accordance with 37 C.F.R. §§ 1.97 *et. seq.*, the enclosed materials are brought to the attention of the Examiner for consideration in connection with the above-identified patent application. Applicants respectfully request that this Supplemental Information Disclosure Statement be entered and the documents listed on the attached Form 1449 be considered by the Examiner and made of record. Pursuant to the provisions of MPEP 609, Applicants request that a copy of the 1449 form, initialed as being considered by the Examiner, be returned to the Applicants with the next official communication.

Pursuant to 37 C.F.R. §1.97(b), it is believed that no fee or statement is required with the Supplemental Information Disclosure Statement. However, if an Office Action on the merits has been mailed, the Commissioner is hereby authorized to charge the required fees to Deposit Account No. 19-0743 in order to have this Supplemental Information Disclosure Statement considered.



SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Serial No: 10/722,115

Filing Date: November 25, 2003

Title: METHOD AND APPARATUS FOR CELL AND ELECTRICAL THERAPY OF LIVING TISSUE

Page 2  
Dkt: 279.597US1

Pursuant to 37 C.F.R. 1.98(a)(2), Applicant believes that copies of cited U.S. Patents and Published Applications are no longer required to be provided to the Office. Notification of this change was provided in the United States Patent and Trademark Office OG Notices dated October 12, 2004. Thus, Applicant has not included copies of any Published Applications cited with this submission. Should the Office require copies to be provided, Applicant respectfully requests that notice of such requirement be directed to Applicant's below-signed representative. Applicant acknowledges the requirement to submit copies of foreign patent documents and non-patent literature in accordance with 37 C.F.R. 1.98(a)(2).

The Examiner is invited to contact the Applicant's Representative at the below-listed telephone number if there are any questions regarding this communication.

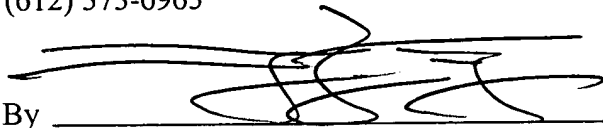
Respectfully submitted,

STEVEN D. GIROUARD ET AL.

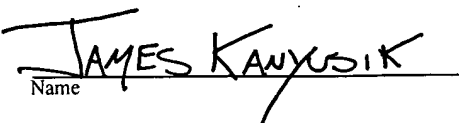
By their Representatives,

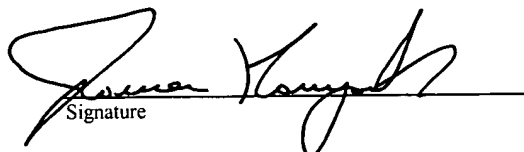
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.  
P.O. Box 2938  
Minneapolis, MN 55402  
(612) 373-6965

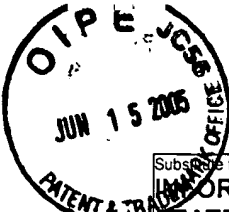
Date 6/10/2005

By   
Zhengnian Tang  
Reg. No. 55,666

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 13th day of June, 2005.

  
Name

  
Signature



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO  
**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
(Use as many sheets as necessary)

Complete if Known	
Application Number	10/722,115
Filing Date	November 25, 2003
First Named Inventor	Girouard, Steven
Group Art Unit	1744
Examiner Name	Unknown

Sheet 1 of 2 Attorney Docket No: 279.597US1

**US PATENT DOCUMENTS**

Examiner Initial *	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Filing Date If Appropriate
	US-2002/0172663 A1	11/21/2002	Palasis, M. , et al.	01/23/2002
	US-2003/0087867 A1	05/08/2003	Vogels, R. V., et al.	08/19/2002

**OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		BURTON, D. Y., et al., "The Incorporation of an Ion Channel Gene Mutation Associated with the Long QT Syndrome (Q9E-hMiRPI) in a Plasmid Vector for Site-Specific Arrhythmia Gene Therapy: <i>In Vitro</i> and <i>In Vivo</i> Feasibility Studies", <u>Human Gene Therapy</u> , 14, (2003), 907-922	
		DEL MONTE, F. , et al., "Targeting Calcium Cycling Proteins in Heart Failure Through Gene Transfer", <u>The Journal of Physiology</u> , 546(1), (2002), 49-61	
		DONAHUE, J. K., et al., "Focal Modification of Electrical Conduction in the Heart by Viral Gene Transfer", <u>Nature Medicine</u> , 6(12), (2000), 1395-1398	
		HAMAWY, A. H., et al., "Cardiac Angiogenesis and Gene Therapy: A Strategy for Myocardial Revascularization", <u>Current Opinion in Cardiology</u> , 14, (1999), 515-522	
		HONG, Y. S., et al., "Localized Immunosuppression in the Cardia Allograft Induced by a New Liposome-Mediated IL-10 Gene Therapy", <u>The Journal of Heart and Lung Transplantation</u> , 21, (2002), 1188-1200	
		HUQ, F., et al., "Session 5: Cellular and Subcellular Basis of Remodeling - Modulating Signalling Pathways in Hypertrophy and Heart Failure by Gene Transfer", <u>Journal of Cardiac Failure</u> , 8(6)(Suppl.), (2002), S389-S400	
		JAYAKUMAR, MD, J., et al., "Gene Therapy for Myocardial Prevention - Transfection of Donor Hearts With Heat Shock Protein 70 Gene Protects Cardiac Function Against Ischemia-Reperfusion Therapy", <u>Circulation</u> , 102 (Suppl. III), (2000), III-302-III-306	
		KOCH, W. J., et al., "Gene Transfer of $\beta$ -Adrenergic Signalling Components for Heart Failure", <u>Journal of Cardiac Failure</u> , 8(6) (Suppl.), (2002), S526-S531	
		KOZARSKY, K. F., "Gene Therapy for Cardiovascular Disease", <u>Current Opinion in Pharmacology</u> , 1, (2001), 197-202	
		LEE, L. Y., et al., "Exogenous Control of Cardiac Gene Therapy: Evidence of Regulated Myocardial Transgene Expression After Adenovirus and Adeno-Associated Virus Transfer of Expression Cassettes Containing Corticosteroid Response Element Promoters", <u>J Thorac Cardiovasc Surg</u> , 118, (1999), 26-35	
		LIN, H., "Specific Region of the c-myc Promoter is Responsive to Electric and Magnetic Fields", <u>Journal of Cellular Biochemistry</u> , 54, (1994), 281-288	

EXAMINER

DATE CONSIDERED

Substitute Disclosure Statement Form (PTO-1449)  
\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional) 2 Applicant is to place a check mark here if English language Translation is attached

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO <b>INFORMATION DISCLOSURE          STATEMENT BY APPLICANT</b> <i>(Use as many sheets as necessary)</i>	Complete if Known	
	Application Number	10/722,115
	Filing Date	November 25, 2003
	First Named Inventor	Girouard, Steven
	Group Art Unit	1744
	Examiner Name	Unknown
Sheet 2 of 2	Attorney Docket No: 279.597US1	

OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		LIN, H., "Regulating Genes with Electromagnetic Response Elements", <u>Journal of Cellular Biochemistry</u> , 81, (2001), 143-148	
		MACNEILL, MD, B. D., et al., "Targeting Signaling Pathways in Heart Failure by Gene Transfer", <u>Current Atherosclerosis Reports</u> , 5, (2003), 178-185	
		MÁRBAN, E., et al., "Gene Therapy for Cardiac Arrhythmias", <u>Cold Spring Harbor Symposia on Quantitative Biology</u> , Vol. LXVII - The Cardiovascular System, Published by Cold Spring Harbor Laboratory Press, (2002), 527-531	
		NUSS, H. B., et al., "Reversal of Potassium Channel Deficiency in Cells from Failing Hearts by Adenoviral Gene Transfer: A Prototype for Gene Therapy for Disorders of Cardiac Excitability and Contractility", <u>Gene Therapy</u> , 3, (1996), 900-912	
		RADISIC, M., "From the Cover: Functional Assembly of Engineered Myocardium by Electrical Stimulation of Cardiac Myocytes Cultured on Scaffolds", <u>Proc Natl Acad Sci U S A.</u> , 101(52), (December 28, 2004), 18129-18134	
		ROSS, JEFFREY, "EPICARDIAL PATCH INCLUDING ISOLATED EXTRACELLULAR MATRIX WITH PACING ELECTRODES", <u>Application Serial No. 11/017,627</u> , filed December 20, 2004 (Attorney Docket No. 279.759US1), 87 pgs.	
		ROSS, JEFFREY, et al., "USE OF EXTRACELLULAR MATRIX AND ELECTRICAL THERAPY", <u>Application Serial No. 11/017,237</u> , filed December 20, 2004 (Attorney Docket No. 279.760US1), 89 pgs.	
		RUBENSTRUNK, A., "Transcriptional Activation of the Metallothionein I Gene by Electric Pulses <i>in vivo</i> : Basis for the Development of a New Gene Switch System", <u>The Journal of Gene Medicine</u> , 5, (2003), 773-783	
		RUTANEN, J., et al., "Progress and Prospects - Post-Intervention Vessel Remodeling", <u>Gene Therapy</u> , 9, (2002), 1487-1491	
		SIH, HARRIS J., "IMPLANTABLE MEDICAL DEVICES COMPRISING ISOLATED EXTRACELLULAR MATRIX", <u>Application Serial No. 11/017,432</u> , filed December 20, 2004 (Attorney Docket No. 279.806US1), 87 pgs.	
		WALTHER, W., et al., "Cell Type Specific and Inducible Promoters for Vectors in Gene Therapy as an Approach for Cell Targeting", <u>Journal of Molecular Medicine</u> , 74, (1996), 379-392	
		WATTANAPITAYAKUL, S. K., et al., "Recent Developments in Gene Therapy for Cardiac Disease", <u>Biomedical &amp; Pharmacotherapy</u> , 54, (2000), 487-504	
		WESTLUND, RANDY, "LEAD ELECTRODE INCORPORATING EXTRACELLULAR MATRIX", <u>Application Serial No. 11/017,238</u> , filed December 20, 2004 (Attorney Docket No. 279.811US1), 85 pgs.	
		WYMAN, T., et al., "Promoter-Activated Expression of Nerve Growth Factor for Treatment of Neurodegenerative Diseases", <u>Gene Therapy</u> , 6, (1999), 1648-1660	

EXAMINER

DATE CONSIDERED

Substitute Disclosure Statement Form (PTO-1449)

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional) 2 Applicant is to place a check mark here if English language Translation is attached